Dyersburg Water System's Annual Water Quality Report-2006

The City of Dyersburg's Annual Water Quality Report is designed to inform its water customers about the quality of its drinking water and about services provided to our customers. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water sources. We are committed to ensuring the quality of your water.

Is my drinking water safe?

YES! Dyersburg's water meets all of EPA's health standards. As you can see in the chart on the next page, we detected only 8 contaminants, and found all of those contaminants to be at safe levels.

What is the source of my water?

Your water comes from a supply of 7 wells located within the city limits. All of the wells are over 600 feet deep and draw water from the Memphis Sand Aquifer. The Roger Hawkins Water Treatment Plant can provide up to 6 million gallons of water a day and the South Main Plant can provide up to 5 million gallons of water a day.

The City Of Dyersburg has a wellhead protection plan that is available upon request. Our goal is to protect our water from contaminants and we are working with the State to determine the vulnerability of our water supply to contamination. The Tennessee Department of Environment and Conservation (TDEC) have prepared a Source Water Assessment Program (SWAP) Report for the water supplies serving water to this water system. The SWAP Report assesses the susceptibility of public water supplies to **potential** contamination. Water sources have been rated as reasonably susceptible, moderately susceptible or slightly susceptible based on geologic factors and human activities in the vicinity of the water source. The Dyersburg Water System sources rated as reasonably susceptible to potential contamination.

An explanation of Tennessee's Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed online at www.state.tn.us/environment/dws/dwassess.php or you may contact the Dyersburg Water System or TDEC at **1-888-891-TDEC** to obtain copies of specific assessments.

Why are there contaminants in my water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the

Environmental Protection Agency's Safe Drinking Water Hotline (**800-426-4791**).

For more information about your drinking water, please call (731) 288-0724 or go online at www.cityofdyersburg.org and click on Water Treatment Department.

Este informe contiene información muy importante. Tradúscalo o hable con alguien que lo entienda bien.

How can I get involved?

The Dyersburg Board of Mayor & Aldermen meet the 1st & 3rd Monday night of each month at 7:00 p.m. in the Municipal Court Building. The public is welcome to attend these meetings. Please call **731-288-7600**, if you wish to be placed on the agenda.

Is our water system meeting other rules that govern our operations?

Yes. To ensure safe drinking water, the Tennessee Dept. of Environment and Conservation and the Environmental Protection Agency require water systems to regularly analyze the water and report results. The TDEC inspects the Dyersburg Water System. This inspection is called a sanitary survey. The Dyersburg Water System scored **98** in September 2005. Copies of these reports are kept on file at the water plant.

Do I Need To Take Special Precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have under-gone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about their personal sanitation, food preparation, handling infants and pets, and drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (**800-426-4791**).

Dyersburg Cross Connection Program

The Dyersburg Cross Connection Program was developed to inform the public of the dangers of cross connections, to identify possible cross connections, to insure that cross connection control devices are installed where needed and to protect our drinking supply.

What is a Cross Connection?

A cross connection is a permanent or temporary piping arrangement which can allow your drinking water to be contaminated if a backflow condition occurs.

What is a backflow?
A backflow is where water is flowing in the opposite direction from its normal flow. This can happen when pressure drops in the distribution system. Backflow can allow contaminants to enter our drinking water system through cross connections.

Where can cross connections be found?
Cross connections can be found in homes, farms, laboratories, small businesses, and factories.

What are some common fixtures likely to have cross connections?

Garden hoses	Dishwashers
Car Wash	Sewage pumps
Sprinkler systems	Boilers
Pesticide Mixing Tanks	Sinks

Why should I be worried about backflows?
Backflows due to cross connections can cause sickness and/or chemical contamination.

Can backflows be avoided?
Yes. Each spigot at your home should have a hose-bibb vacuum breaker installed. Businesses and factories should have reduced-pressure-backflow preventers, double check-valve assemblies or vacuum breakers installed.

What has the City done to help prevent backflows?
All high hazard areas in Dyersburg already have backflow preventers installed. As of 1-12-06, there are about 680 devices installed in Dyersburg with new devices being installed monthly.

For more information on cross connection control and backflow prevention for your home or business, please call 731-288-7632.

W a t e r Q u a l i t y D a t a

What does this chart mean?

- **MCLG**: Maximum Contaminant Level Goal, or the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **MCL**: Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- **MRDLs:** Maximum Residual Disinfectant Levels or a level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap without an unacceptable possibility of adverse health effects. .

- **MRDLG:** Maximum residual disinfectant level goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGS do not reflect the benefit of the use of disinfectants to control microbial contaminants.

Contaminant	*MCLG*	*MCL*	*Level Found*	*Units*	*Range of Detections*	*Violation*	*Date of Sample*	*Typical source of Contaminant*
Microbiological Contaminants								
Total Coliform Bacteria	0	<2	1	positive samples	0-2	No	2005	Naturally present in the environment
Inorganic Contaminants								
Copper	1.3	AL=1.3 ppm	0.069	ppm	*	No	2005	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Fluoride	4	4 ppm	1.02	ppm	0.91-1.1	No	2005	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Chlorine	4	4	<4	ppm	*	No	2005	Drinking water
Lead	0	AL=15 ppb	0.5	ppb	*	No	2005	Corrosion of household
Volatile Organic Contaminants								
TTHMs (Total Trihalomethanes)	0	80 ppb	40	ppb	17-68	No	2005	By-product of drinking water chlorination
THAAS (Total Haloacetic Acids)	NA	60 ppb	10	ppb	3-17	No		
Miscellaneous Compounds								
Sodium	N/A	N/A	9.14	ppm	3.4-12	No	2005	N/A

Microbiological Contaminants: **501** samples were analyzed for bacteria and 3 tests were positive. 12 repeat samples were collected and all samples were negative.

Lead & Copper: We had 1 out of 30 sites exceed the action level for lead and 0 sites exceed the copper action level.

Iron: Occurs naturally in our raw water and occasionally accumulates in the distribution system. Iron shows up as "red" or "rusty" water at your tap. Although you do not want to drink

water that is not clear, iron is not considered to be a hazard to your health. We test for iron daily and it is usually less than 0.1 ppm. The aesthetic limit for iron is 0.3 ppm.

Turbidity: Turbidity does not present any risk to your health. We monitor turbidity, which is a measure of the cloudiness of water, because it is a good indicator that our filtration system is functioning properly.

Abbreviations: . PPB: parts per billion or micrograms per liter . ppm: parts per million or milligrams per liter . N/A: not applicable . NTU: Nephelometric Turbidity Unit, used to measure cloudiness in drinking water . MFL: million fibers per liter, used to measure asbestos concentration. . AL: Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow. . TT: Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

About the data: Most of the data presented in this table is from testing done between 1 Jan - 31 Dec 2005. We monitor for some contaminants less than once per year, and for those contaminants, the date of the last sample is shown in the table.